




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,024	01/15/2002	Ytsen Wielstra	NL010052	5698
24737	7590	10/06/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			METZMAIER, DANIEL S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/047,024	Applicant(s) WIELSTRA ET AL.	
	Examiner Daniel S. Metzmaier	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-11 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JSR Corporation, EP 1 022 318 A2. JSR Corp (Tables 8-10, 13, paragraphs [0146] and [0152] et seq) discloses coating compositions employing silica, organosilane and metal alkoxide.

JSR Corp differs from the claims in the characterization of the pH of the compositions as under basic conditions.

JSR Corp (paragraph [0152] to [0159] and [0162]) discloses the use zirconium, titan and aluminum alkoxides as agents to increase the speed of curing as well as alkali compounds, basic compounds and amine compounds, which would have resulted in the method of adding under basic conditions.

JSR Corp (paragraph [0162]) further teaches the component (f), which may include the metal alkoxides, may be in the form of a combination of two or more substances.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ basic curing agents as alkali compounds, basic compounds and amine compounds; which are known to be basic and would be expected to result in a basic composition.

Regarding claims 2 and 3, JSR Corp (paragraph [0152] and [0159]) discloses the metal diketonates of said zirconium, titan and aluminum metals. Regarding claims 4, 5 and 6, please see Tables 8-10 and 13 of JSR Corporation.

Regarding claims 8-11, the components are disclosed in the JSR Corp references for their use in coating substrates for the advantage resisting fouling, durability and transparency.

1. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Philips Electronics N.V., WO 98/22548, in view of JSR Corporation, EP 1 022 318 A2.

Philips Electronics (examples, esp. example 5) discloses lacquer compositions comprising GLYMO (epoxysilane), TEOS, LUDOX TM (alkaline stabilized silica) and maleic acid.

Philips Electronics differs from the claims in the further addition of a metal alkoxide and the explicit characterization of the compositions under basic conditions.

Philips Electronics (page 6, lines 22 et seq) discloses the addition of metal alkoxides in addition to TEOS.

JSR Corp (Tables 8-10, 13, paragraphs [0146] and [0152] et seq) discloses coating compositions employing silica, organosilane and metal alkoxide.

JSR Corp (paragraph [0152] to [0159] and [0162]) discloses the use zirconium, titan and aluminum alkoxides as agents to increase the speed of curing as well as alkali compounds, basic compounds and amine compounds, which would have resulted in the method of adding under basic conditions.

JSR Corp (paragraph [0162]) further teaches the component (f), which may include the metal alkoxides, may be in the form of a combination of two or more substances.

Regarding claims 2 and 3, JSR Corp (paragraph [0152] and [0159]) discloses the metal diketonates of said zirconium, titan and aluminum metals. Regarding claims 4, 5 and 6, please see Tables 8-10 and 13 of JSR Corporation.

Regarding claims 8-11, the components are disclosed in the JSR Corp references for their use in coating substrates for the advantage resisting fouling, durability and transparency.

These references are combinable because they teach coating compositions. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ metal alkoxides such as those taught in the JSR Corp and the basic

Art Unit: 1712

curing agents as alkali compounds, basic compounds and amine compounds; which are known to be basic and would be expected to result in a basic composition compatible with the basic Ludox TM.

Response to Arguments

2. Applicant's arguments filed July 16, 2004 have been fully considered but they are not persuasive.

3. Applicants assert that the JSR reference teaches equally the use of the metallates, acids, and basic materials as component (f). It is thereafter concluded that JSR provides no motivation to combine the metallates the basic compounds. It is asserted that one skilled in the art could have equally chosen also the use of acids, or a combination of acids and bases resulting in neutral systems. JSR clearly (paragraph [0162]) contemplates mixtures. JSR further teaches ([0157]) the partial hydrolysates as well. JSR further ([0150]) teaches component (f) is a catalyst.

It is known in the art that metal alkoxides are basic upon self hydrolysis and the said hydrolysis is catalyzed both by acid or base. Since each of the catalyst are taught in the alternative and in combination, applicants have proffered no evidence to contradict said teaching, one skilled in the art would have reasonably expected the alternative to the base with metal alkoxide to also catalyze the reaction systems; It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the combination of the metal alkoxides with base as component (f) in the JSR coatings.

Art Unit: 1712

4. Applicants assert the Phillips reference teaches acid catalyst rather than base catalyst and the use of a base taught in the JSR teaching is in direct conflict therewith. This has not been deemed persuasive since it is well known that hydrolysis-condensation reaction are catalyzed by both acids and bases as shown in the JSR reference. Applicants have not shown the claimed invention to be unobvious over the teachings of the prior art.

5. To the extent instant comparative example 9 is relied on as evidence of unexpected results, said example is not commensurate in scope with the claimed invention.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1712

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM